

### III. AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior listings of claims.

1. (Currently amended) A computer system ~~reasoning-model~~ component for generating user recommendations for a defined knowledge base, the ~~component~~ computer system comprising a reasoning model, the reasoning model comprising:

a component for storing, maintaining and representing a decision graph definable by an author, the decision graph comprising nodes and links between the nodes, the nodes comprising a set of decision nodes, and a set of feedback nodes,

each of the nodes in the decision graph comprising rules defined by the author

to define links to other nodes in the graph based on a processing of user information including probabilistic reasoning, and

for a decision node, to request and obtain user information, and

for a feedback node, to provide feedback to users, ~~and~~

a component to traverse the decision graph and fire the rules defined in the decision graph nodes; and

a communication component for communicating the feedback to the users to assist the users in making decisions regarding a business transaction.

2. (Currently amended) The computer system ~~component~~ of claim 1 in which the decision nodes comprise question nodes and the feedback nodes comprise recommendation and promotion nodes.

3. (Currently amended) The computer system ~~component~~ of claim 2 in which promotional nodes comprise cross-sell and up-sell nodes.
4. (Currently amended) The computer system ~~component~~ of claim 1 in which the nodes contain no information relating to presentation of data to a user.
5. (Currently amended) The computer system ~~component~~ of claim 1 in which the rules defining links to other nodes in the graph comprise rules accessing and evaluating one or more of:
  - a) personalization choices collected implicitly or explicitly from the user,
  - b) static data relating to the user,
  - c) a dynamically generated user model,
  - d) attributes of elements in the knowledge base, and
  - e) author-related goals.
6. (Currently amended) The computer system ~~component~~ of claim 1 in which the decision graph comprises multiple entry points.
7. (Currently amended) The computer system ~~component~~ of claim 1 in which the decision graph comprises nodes potentially chaining the decision graph to other decision systems.
8. (Original) The computer system of claim 1 in which the rules defining links between

nodes in the decision graph utilize one or more of:

- a) weighting systems,
- b) fuzzy logic systems, and
- c) probabilistic reasoning.

9. (Currently amended) A computer system ~~reasoning model component~~ for generating user recommendations for a defined knowledge base, the ~~component~~ computer system comprising a reasoning model, the reasoning model comprising:

a component for storing, maintaining and representing a decision graph definable by an author, the decision graph comprising nodes and links between the nodes, the nodes comprising:

a set of decision nodes, and a set of feedback nodes, the decision nodes comprising:

question nodes and the feedback nodes comprising recommendation and promotion nodes, each of the nodes in the decision graph comprising rules defined by the author to define links to other nodes in the graph, and

for a decision node, to request and obtain user information, and

for a feedback node, to provide feedback to users,

the rules defining links to other nodes in the graph comprising rules accessing and evaluating one or more of:

- (f) personalization choices collected implicitly or explicitly from the user,
- (g) static data relating to the user,
- (h) a dynamically generated user model,

(i) attributes of elements in the knowledge base, and

(j) author-related goals; and utilize one or more of:

(i) weighting systems,

(ii) fuzzy logic systems, and

(iii) probabilistic reasoning, and

a component to traverse the decision graph and fire the rules defined in the decision graph nodes; and

a communication component for communicating the feedback to the users to assist the users in making decisions regarding a business transaction.

10. (Currently amended) A computer program product for providing user recommendations, the computer program product comprising a ~~computer-useable medium~~ recordable data storage medium having computer readable code means embodied in said medium, comprising computer readable program code means for implementing the system component of any of claims 1 to 10 9.

11. (Original) The computer program product of claim 10 wherein said computer readable code means comprises a computer readable signal and said medium comprises a computer readable signal-bearing medium.

12. (Cancelled).

13. (Currently amended) The product of claim 11 wherein said recordable data storage

medium is a modulated carrier signal.

14. (Original) The product of claim 13 wherein said signal is a transmission over a network.

15. (Currently amended) ~~A computer program comprising computer program code means~~  
~~adapted~~ A program product stored on a computer-readable medium, which when executed,  
enables a computer infrastructure to establish the components computer system of claim 1 when  
said program product is run on a the computer system infrastructure.